

CZECH/34-59-7-15/22


AUTHORS: Dufek, Rudolf, Ing. and Kopa, Luboš, Ing.

TITLE: Determination of Aluminium Oxide in Aluminium Bronze
(Stanovení kysličníku hlinitého v hliníkovém bronzu)

PERIODICAL: Hutnické Listy, 1959, Nr 7, pp 620-622 (Czechoslovakia)

ABSTRACT: It is stated that, so far, methods for determining the oxygen content in aluminium bronze have not been described. In the Metal Research Institute of Panenské Břežany two methods are applied. In the first instance chemical determination, which is easier to introduce into the manufacturing process, in the second instance the vacuum extraction method is applied. The execution of both methods is described. For some specimens both methods were applied and the results are compared in Table 5. The results obtained by the brom-methanol method, so far used exclusively for determining oxygen in aluminium, is in good agreement with the results obtained by vacuum extraction. The smelting in vacuum is effected at 1650°C directly in a graphite crucible without

Card 1/2 a steel bath. The obtained values were between the limits



CZECH/34-59-7-15/22

Determination of Aluminium Oxide in Aluminium Bronze

of 0.0005 to 0.0030% O₂.

There are 5 tables and 7 references, 5 of which are German, 1 English and 1 Czech.

ASSOCIATION: Výzkumný ústav kovu, Panenské Břežany
(Metals Research Institute, Panenske Brezany)

✓

Card 2/2

KOPA, LUBOS

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81979

Author : Kopa, Lubos

Inst : Not given

Title : Determination of Oxygen Content in Aluminum
by the Vacuum Fusion Method

Orig Pub : Hutn. listy, 1959, 14, No 4, 322-324

Abstract : A modification of the Sloman method (Sloman, J. Instit. Metals 71, 391 (1945)) for the determination of O combined with aluminum as Al_2O_3 is described. Upon heating with graphite in the oven of the vacuum extraction apparatus, Al carbide and CO are formed; CO is determined in the Orsat analyzer. 16-20 g of copper (to prevent the distillation of Al) is placed in a graphite crucible (diameter 20 mm, height

Card 1/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81979

50 mm), which is placed in a quartz crucible (diameter 33 mm, height 100 mm), sprinkled with powdered graphite and connected to a quartz tube and a 2-stage diffusion pump; this is heated to 1250° for 15-30 min. The temperature is then lowered to 1050°, a 1.5-2 g sample is added, and after 10 minutes the temperature is raised to 1550°. The evolution of CO is complete within 20-30 minutes. In the control experiment, CO is formed for 30 minutes, the quantity being ~0.01 ml. The determination error is 0.0010-0.0057%. --
N. N. Turkevich

Card 2/2

L 3762-66 EWT(1)/I/EWP(t)/EWP(b)/EWA(h) IJP(c) JD/AT

ACC NR: AP5027864

CZ/0034/65/000/001/0036/0038

AUTHOR: Kopa, Lubos (Engineer)

TITLE: Preparation of gold of semiconductor purity

SOURCE: Hutnicke listy, no. 1, 1965, 36-38

TOPIC TAGS: gold, metal melting, chemical precipitation, semiconductor alloy

ABSTRACT: [Author's English summary]: Data collected during orientation trials of zone refining of gold are presented. A preparation method of gold of 99.999% purity is described; the metal contains a maximum of 1ppm Ag, 1 ppm Cu, 1 ppm Bi, 4 ppm Pb, 1 ppm Fe, and 1 ppm of Sb. The method is based on chemical refining of an AuCl₃ solution obtained by dissolving gold in pure aqua regia. Sulfides of some impurities are precipitated with AuS by a solution of Na₂S. The sulfides are filtered and redissolved, and the solution and precipitation steps repeated several times. Au is finally obtained by reduction with SO₂ and melted under vacuum. Orig. art. has: 2 tables.

ASSOCIATION: Vyzkumny ustav kovu, Panenske Brozany (Metal Research Institute)

SUBMITTER: 30

ENCL: 00

SUB CODE: MM, GC

NR REF SOV: 001

OTHER: 010

JPRS

Card 1/1

MIRESLAW KOPA

7
/ Crimping of viscose fibers. Miroslaw Kopa. Przegląd
Włókienniczy 12, 15-23, 24(1958)(English summary).—A
review covering mech. and chem. modes of crimped fiber
production, properties, and examin. of the fiber. 38 refer-
ences. A. Szafranski

201 n-y
4E2c fj

2

J. J.

KOPA, Miroslav

Imparting twist to rayon fibers. Tekst.prom. 20 no.4:78-81
Ap '60. (MIRA 13:8)
(Textile fibers, Synthetic)

P/014/62/041/011/002/002
D244/D307

AUTHORS:

Rybicki, Zbigniew, Kopa, Mirosław, Klekot, Jan and
Wejner, Eugeniusz

TITLE:

A new method of hermetic spinning of viscose staple.
I. A spinning machine operating at reduced pressure

PERIODICAL:

Przemysł Chemiczny, v. 41, no. 11, 1962, 653-657

TEXT:

A brief review is given, explaining the need for the hermetic enclosing of spinning machines (to prevent air-pollution by H_2S and CS_2) and discussing the methods used hitherto for hermetic spinning and for the recovery of toxic, sulfurous gases. The present work was carried out in an attempt to provide an answer to these problems, which had so far remained unresolved. Studies of the formation and evolution of gases resulting from the contact of viscose with the acidic spinning bath showed that 1 kg of viscose may give rise to 21.60 g CS_2 , 6.30 g H_2S , 5.50 g CO_2 , 0.30 g CO_2S , and 0.40 g SO_2 . Full decomposition of viscose and complete removal of CS_2 in a scaled system requires several hundred meters of the fiber

Card 1/5

P/014/62/041/011/002/002
D244/D507

A new method of hermetic spinning ...

strip to be stored; thus, for an aqueous plasticizing bath at 90°C, and a strip 500,000 den thick spun at 65 m/min, the CS₂ is fully removed after 20 sec. Tests with an experimental installation, in which viscose was passed from an acid bath into a reduced-pressure chamber, where it was stored on 2 rollers (the lower roller being immersed in a circulating, hot plasticizing bath), and finally passed into a plasticizing bath and outside through a hermetic seal, showed that 98.8% degassing (w.r.t. CS₂) occurred after 20 sec in the degassing chamber, with the plasticizing bath at 72°C. The industrial scale installation based on these studies (Fig. 7) consists of acid bath troughs containing the spinning nozzles, from which the fiber is passed (together with the bath liquid) into a reduced pressure (15-20 mm H₂O below atmospheric) chamber where it is fully degassed, first in the spinning bath and subsequently in a hot plasticizing bath (2). The fiber is removed through a hydraulic seal. The sulfurous gases are drawn through (4) into condensers and absorbers (5, 6, 7), by the suction created by an air-injector (8). The CS₂ is condensed in 2 stages, (65% of original CS₂ used for the oxidation of alkali cellulose), and the H₂S is absorbed by a suspension of alkali cellulose.

Card 2/3

A new method of hermetic spinning ...

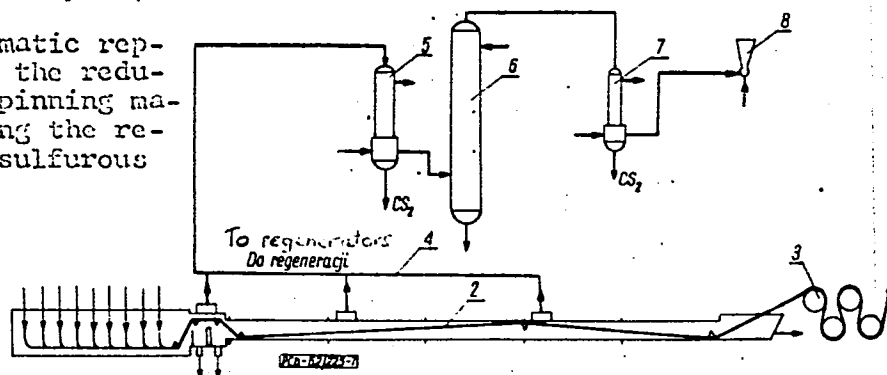
P/014/62/041/011/002/002
D244/D307

sion of $\text{Fe}(\text{OH})_3$ in a solution of soda, with an efficiency of 95-98%. The installation allows about 40% saving in power consumption. There are 7 figures and 5 tables.

ASSOCIATION: Łódzkie Zakłady Włókien Sztucznych (Artificial Fibers Establishment, Łódź)

SUBMITTED: May 26, 1962

Fig. 7: A schematic representation of the reduced-pressure spinning machine, including the regenerators of sulfurous gases



Card 3/3

RYBICKI, Zbigniew; KOPA, Mirosław; KLEKOT, Jan; WEJNER, Eugeniusz

New method of hermetically spinning of viscose rayon staple.
Przem chem 41 no.12:727-730 D '62.

1. Lodzkie Zakłady Włókien Sztucznych, Łódź.

L 12774-63 EWR(q)/BIS/EXT(m) AFFTC/ASD JD/JG
ACCESSION NR: AP3001521 S/0032/63/029/006/0645/0649

AUTHOR: Babko, A. K.; Vdovenko, M.Ye.; Kopa, M. V.

TITLE: Direct photometric determination of rare earth elements by paper chromatography

SOURCE: Zavodskaya laboratoriya, v. 29, no. 6, 1963, 645-649

TOPIC TAGS: rare-earth chromatogram, rare-earth chromatography, lanthanum, neodymium, yttrium, reflection coefficient, chromatographic spot, rare-earth element, paper chromatography, reflected light

ABSTRACT: The authors determined the color intensity of spots from rare earth chromatograms in reflected light, using a universal photometer with a light filter of 574 millimicron wave length. Using various concentrations of lanthanum-, neodymium-, and yttrium-nitrate, they found the reflection coefficient K to be inversely proportional to the amount of substance in the chromatographic spot. Thus, the problem was reduced to obtaining spots of the same size and shape. The experimental technique consisted in placing 0.001 ml of the rare metal nitrate solution on a chromatographic paper strip, allowing it to stand for 30 minutes in a humidifying chamber, followed by 5 hours of ascending chromatography

Card 1/2

FORTUNATOV, N.S.; FOKINA, Z.A.; KOPA, M.V.; BIRYUK, L.I.

Interaction of tetrachlorides of elements of group IV with sulfur
monochloride. Ukr.khim.zhur. 31 no.2:148-153 '65.

(MIRA 18:4)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

245200

69969
S/170/60/003/01/12/023
B022/B007

AUTHORS: Kopa-Ovdiyenko, L. M., Migunov, L. V.

TITLE: The Generalization of the Method of Quasisteady Conditions in the Experimental Determination of Thermal Diffusivity Coefficients

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 1, pp 76 - 81

TEXT: In the present paper the endeavor is made to simplify the method of determining the thermal diffusivity coefficient by generalizing the solution of the given non-steady heat conductivity for the case of a variable specific heat current. Proceeding from the measurement of the time interval from the beginning of heating until an arbitrary certain temperature at a certain point of the body, the thermal diffusivity coefficient is determined. Fig. 1 gives the curves of the heating of a body of simple shape by means of a constant heat current at $r = r_1$ (curve 1) and $r = r_2$ (curve 2). The found dependence $q_p(r)$ and two extreme cases are mentioned (Fig. 2). Experiments were made with samples of steel of the type IX18N9T. For measuring the thermoelectromotive force of the thermocouples the galvanometer GZP-47²⁰ with the potentiometer PV-6²⁰ was used. The dependence of the thermal diffusivity coefficient a of the steel of the

Card 1/2

MAAR, D.; KOPAC, C.

Results of conservative therapy in early diagnosed osteoarticular tuberculosis. Acta chir. orthop. traumat. Cech. 32 no.2:101-108 Apr'65.

1. Krajska nemocnica tuberkulózy a chorob pľúcnych a Fyziologická katedra Ústavu pre ďalšie vzdelávanie lekárov a farmaceutov v Podunajských Biskupiciach (riaditeľ a vedúci: doc. dr. K. Virsik).

CUPIC, Vukan; CVORIC, Angelina; KOPAC, Danica

Diagnosis, treatment and prognosis of acute glomerulonephritis
in children. Srpski arh. celok. lek. 85 no.1:30-41 Jan 57.

1. Pedijatrijska klinika Medicinskog fakulteta u Beogradu

Upravnik: Matija Ambrosic.

(GLOMERULONEPHRITIS, in inf. & child
(Ser))

VRBA, C.;KOPAC, F.;BOBOVANSKY, A.;SOVA, J.

Certain pharmacological properties of local anesthetics from the diethylaminoacetanilide group. Cesk. fysiол. 9 no.11:98-99 Ja 60.

1. Ustav farmakologie vet. fak. VSZL, Ustav farmaceuticke chemie farmaceut. fak. MU, Brno.

(ANESTHETICS LOCAL pharmacol.)

KOPAC, Ivan

The results of fluorography in the district of Trbovlje and analysis of tuberculosis at the end of 1953. Zdrav. vest., Ljubljana 23 no.9-10:230-238 1954.

1. Bolnica za tuberkulozo Novo Celje, ravnatelj dr. Ivan Kopac.
(TUBERCULOSIS, PULMONARY, prev. & control
Yugosl., mass survey)

KOPAC, Ivan

Results of the treatment of tuberculous meningitis in Nova Celje
during 1949-53. Zdrav.vest., Ljubljana 24 no.3:73-76 1955.

1. Spec. bolnisnica za pljučno tuberkulozo v Novem Celju - ravnatelj
Dr. I. Kopac.
(TUBERCULOSIS, MENINGEAL, therapy)

Kopac, J.

AGRICULTURE

New sugar-beet harvesters introduced. p. 169.

Vol. 3, no. 8, Aug. 1958

Monthly Index of East European Accessions (EEAI) LC, Vol. 8, No. 4, April 1959

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000824420020

KOPAC, O.

The food industry helps agriculture.

p. 161
Vol. 6, no. 4, 1955
PRUMYSL POTRAVIN
Praha

So: Monthly List of East European Accessions (EEAL), LC, VOL. 5, no. 3
March 1956

KOPAC, Zvonimir, dr.

Are the plasma cells the only producers of serum antibodies?
Lijecn. vjesn. 86 no.12:1477-1486 D ' 64

KOPAC, Zvonimir

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000824420020

Pathology in Bosnia and Herzegovina. Rad.Med.fak.Zagreb Vol.2:
87-120 '55.

1.Aus dem Institut für pathologische Anatomie der Medizinischen
Fakultät der Universität in Zagreb.

(VITAL STATISTICS,
mortal & morbidity in Yugosl.)

KOPACEK, Alois

Annual mining results of the units competing for the Standard of Ore Mining. Rudy 10 no.9:297-298 S '62.

1. Predseda Ustredniho vyboru odborove skupiny, Praha.

KOPACEK, Alois

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000824420020

Results of the 1962-1963 mining year as reflected in the competition for the Ore Mining Standard in Czechoslovakia. Rudy 11 no.9:283-284 S '63.

1. Predseda Ustredniho vyboru odborove skupiny.

KOPACEK, J.

Forecasting the minimum temperature by means of the Brunt method.
p.105. METEOROLOGICKE ZPRAVY. Vol. 6, No. 4. Sept. 1953.

SOURCE: East European Accessions List. (EEAL), LC, Vol. 5. No. 3, March 1956.

Kopacek, J.

CZECH

145. Dynamic surface pressure changes and their
significance for weather forecasting. S. Hlavinka,
J. KOPACEK, V. VITEK and O. ZIKMUNDA. Czech. J.
Phys., 4, No. 3, 350-70 (Sept. 1954).

An equation is derived for dynamic surface pressure
changes. The development term of this equation is
applied to certain synoptic situations and its diagnostic
and prognostic value is studied.

KOPACEK, J.; HRUBY, J:

Glider pilots and theory. p. 309. (Kridla Vlasti, No. 10, May 1957, Praha, Czechoslovakia)

S0: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. U_ncl.

Kopacek, Jaroslav

PHASE I BOOK EXPLANATION

CZECH/5120

Meteorologie pro sportovní letce (Meteorology for Sports Flyers) Prague, Naše vojsko, 1960. 241 p. 4,000 copies printed. (Series: Kniznice svazarmu, sv. 5)

Ed.: Karel Zelený; Assistant Editors: For Ch. 2: Mojmir Prokop, Doctor; Ch. 3: Theoretical pt. Mojmir Prokop, Doctor, and Ivan Cernoch, Chas. 4, 6, and 7: Oldrich Kostka, Doctor; Chas. 5 and 13: Ladislav Hajek, Doctor; Chas. 8 and 9: Jaroslav Kopacek, Doctor; Ch. 10: Milan Koldovsky and Jiri Horak; Chas. 11-14: Jiri Porckgott, Doctor; Resp. Ed.: Jiri Muk.

PURPOSE: This book is intended for sports plane and glider pilots.

COVERAGE: The book, composed to meet the needs of the aeroclubs of Svaz pro spolupraci s armadou (Union for Cooperation With the Army), discusses the principal types of weather phenomena likely to be encountered in flight. The measurement of meteorological elements is described. Meteorological phenomena of particular interest to glider pilots, viz., convection, turbulence, mountain currents, etc., are treated in some detail. Synoptic maps and weather reports are briefly described. Review questions accompany each chapter. No personalities are mentioned. There are 42 references: 7 Soviet, 21 English, 8 Czech, 4 German, and 2 Polish.

Card 1/1

KOPACEK, JAROSLAV

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: /not given/

Affiliation: /not given/

Source: Prague, Studia Geophysica and Geodetica, Vol 5, No 4, 1961, p 377.

Data: Meteorological Photography /In German/, Halle (Saale), Fotokinoverlag, 1960. 160 pages.

Author: KOLDOVSKY, Milan

Reviewer: KOPACEK, Jaroslav

L 31420-66 FCC GW/WS-2
 ACC NR: AP6022982 SOURCE CODE: CZ/0085/65/000/003/0055/0062
 AUTHOR: Kopacek, Jaroslav 33
 ORG: MJK univers. B
 TITLE: Graphic prediction of thermobaric fields by means of a simple baroclinic model of the atmosphere 12
 SOURCE: Meteorologické spravy, no. 3, 1965, 55-62
 TOPIC TAGS: atmospheric model, mathematic prediction, atmospheric property, atmospheric pressure
 ABSTRACT: In the article, prognostic equations are derived for a baroclinic model of the atmosphere with a constant direction of the thermal wind and a mobile level of nonlinearisation. On the basis of simplified assumptions for that model, two systems of prognostic equations are presented which permit calculating in advance, graphically, the height of the absolute 500-mb topography and the thickness of the relative 1000-500 mb topography. The results of practical application of the equations are illustrated for a forecast of changes of the relative topography. Orig. art. has: 8 figures, 31 formulas and 1 table. [JPRS]
 SUB CODE: 04 / SUM DATE: none / ORIG REF: 001 / OTH REF: 003
 Cord 1/1 35 UDC: 551.509.313
 0915 10 67

ACC NR: AP6002822

SOURCE CODE: CZ/0032/65/015/001/0003/0012

AUTHOR: Kopacek, J. (Engineer)

ORG: College of Mining, Ostrava (Vysoka skola banska)

TITLE: Hydraulic drives for mining machines and their dynamics

SOURCE: Strojirenstvi, v. 15, no. 1, 1965, 3-12

TOPIC TAGS: hydraulic equipment, mechanical engineering, drive train, mining machinery

ABSTRACT: In conjunction with the fact that the Plant for Automation and Mechanization of the Ostrava-Karvin Coal Basin (Zavod automatizace a mechanizace OKR) National Enterprise, Ostrava is developing a hydraulic drive for a 35 kW mine winch, foreign developments in the application of hydraulic drives, their advantages and drawbacks are briefly reviewed, and equations are derived for calculating the principal parameters (starting time, time constant, and maximum working pressure) of the hydraulic circuits for mining machines. The interdependence of these parameters and various factors is shown in diagrams. This work was presented by Engr. M. Zelenka. Orig. art. has: 13 figures, 34 formulas, 2 tables. [JPRS]

SUB CODE: 13 / SUEM DATE: none / ORIG REF: 004 / OTH REF: 002
SOV REF: 003

Card 1/1

KOPACHEK, Irzhi [Kopacek, Jiri]

Solution of the Cauchy problem for linear hyperbolic equations by the finite difference method. Chekhosl mat zhurnal 14 no.1:52-78 '64.

1. Matematicky ustav, Ceskoslovenska akademie ved, Praha 1, Zitna 25.

1/EPF(1)/EPF(1)-/EPF(1)/EPF(1)
19701218

Pr-4/Ps-4/Pu-4 WW

02/0038/64/011/011/0406/0407

AUTHOR: Kopacek, Vladimir (Kopache- Vl.)

TITLE: Analysis of the turbulent mixing of the coolant in the fuel element of a nuclear reactor

SOURCE: Jaderna energie, v. 10, no. 11, 1964, 406-407

TOPIC TAGS: nuclear fuel, nuclear reactor, nuclear reactor technology, reactor coolant

Abstract: /author's Russian summary, modified/ A theoretical analysis is presented of the turbulent mixing of the gas coolant in the hexagonal fuel element of a nuclear reactor, for the purpose of defining an experimental research on the turbulent transfer of heat and mass. The corresponding measurements are planned in two alternatives. The first alternative is measuring the temperature and velocity fields in the element; the second is measuring the local concentration of an inert gas admitted into the coolant stream. Prandtl's length of the mixing path is proposed as a quantitative measure of the intensity of mixing. SVUTT Report 62-08002/1961.

Card 1/2

L 61538-65

ACCESSION NR: AP5019183

ASSOCIATION: Státní výzkumný ústav tepelné techniky, Prague (State Research
Institute of Heat Engineering)

CLASSIFICATION:

ENCL: 00

SUB CODE: NP

NA REF 001: 000

OTHER: 000

UTAC

Card 2/2

IOFA, B.Z.; MITROPANOV, K.P.; PLOTNIKOVA, M.V.; KOPACH, S.

Extraction of complex acids by oxygen-containing solvents. Radiokhimiia
Part 4: Extraction of tetravalent tin. Radiokhimiia 6 no.4:419-425 '64.
(MIRA 18:4)

SHCHERBAKOV, V.K.; KOPACH, Ye.N.

Some characteristics of half-wave and half-wave tuned electric transmission systems with ~~transformers~~ connected in series. Izv. Sib.otd.AN SSSR no.1:11-18 '62. (MIRA 15:3)

1. Transportno-energeticheskiy institut Sibirskogo otdeleniya AN SSSR, Novosibirsk.

(Electric lines)

L 10243-66 EWT(1)/EWA(h)
ACC NR: AP6002409

SOURCE CODE: UR/0105/64/000/010/0031/0036

AUTHOR: ⁵⁵Shcherbakov, V. K. (Novosibirsk); ⁵⁵Putilova, A. T. (Novosibirsk); Kopach, Ye.N. (Novosibirsk); ⁵⁵Vorob'yev, G. V. (Novosibirsk)

ORG: none

TITLE: Power takeoff from half-wave transmission lines ³⁵₃₅

SOURCE: Elektrichestvo, no. 10, 1964, 31-36

TOPIC TAGS: electric power production, transmission line

ABSTRACT: The half-wave homogeneous lines considered are 1500 to 3000 km. in length, and the problems involved in taking off power in parallel or in series at various points in the line are analyzed in detail. Line voltage stability improves as the pick-off points are moved closer to the ends of a half-wave line. Within $1/5$ the line length from the ends, parallel transformer-type power take-off is adapted easily whereas series coupling is better toward the center. The equivalent circuit and voltage distribution curves are shown for the line for parallel-transformer power take-off near the ends of the line and for series transformer take-off toward the center. Experiments and calculations show that when power take-off is 20% of the natural power or less, parallel unified intermediate systems coupled toward the line ends are stable, whereas series take-offs are

Card 1/2

UDC: 621.315.05

L 10243-66

ACC NR: AP6002409

stable toward the center of the line under the same conditions. At the line center an intermediate system is practically independent of the line mode and stability. A combined parallel-series transformer take-off may be used over the entire line with stable operation, and by careful selection of parameters, intermediate parallel-series systems can be decoupled from the line modes at the center of the line. Orig. art. has: 16 figures, 1 table, 11 formulas. [JPRS]

SUB CODE: 09 / SUBM DATE: 17Mar64 / ORIG REF: 020

Card

2/2

SHCHERBAKOV, V.K.; PUTILOVA, A.T.; KOPACH, Ye.N.; VOROB'YEV, G.V.

Joint operation of tuned power transmission lines with intermediate systems. Trudy Sib. nauch.-issl. inst. energ. no.1:
40-44 '64. (MIRA 18:5)

ACC NR: AT6025812

SOURCE CODE: UR/3205/65/000/003/0144/0157

AUTHOR: Kovalev, B. I.; Kopach, Ye. N.

ORG: none

TITLE: Interpretive system for the "Setun'" digital computer

SOURCE: AN SSSR. Sibirskoye otdeleniye. Sibirskiy nauchno-issledovatel'skiy institut energetiki. Trudy, no. 3(22), 1965. Rezhimy i ustoychivost' dal'nykh elektroperedach (Operating modes and stability of long-distance power transmission lines), 144-157

TOPIC TAGS: digital computer, computer language, computer programming / Setun' digital computer

ABSTRACT: Developed by MGU and regularly manufactured by Soviet industry, the small digital computer "Setun'" has these disadvantages: no division operation in the machine commands; small storage capacity; fixed-point system not suitable for solving most practical problems. Hence, a few interpretive systems with sets of standard subroutines were developed by MGU. Unfortunately, some serious short-

Card 1/2

ACC NR: AT6025812

comings of these interpretive systems have become clear as a result of operation of the "Setun" computer in the "Siberian Scientific Research Institute of Power Engineering." Access to standard subroutines is unwieldy and complicated, too many inputs, impossibility of using two variables in one access, cumbersome logic of subroutines, and other shortcomings are listed. They hamper the efficiency of using the machine storage, complicate programing, and make machine-language translations extremely difficult. Hence, a new interpretive system has been developed in the SibNIE, in which the floating-point system of number presentation is adopted, the storage facilities are rationally allocated, and each program consists of a sequence of pseudo-commands to be decoded by the interpretive system; the pseudo-commands do not contain machine operations. Technical details of the new interpretive system and associated subroutines are given; operations and some typical problems are tabulated. Orig. art. has: 1 figure, 1 formula, and 6 tables.

SUB CODE: 09 / SUBM DATE: none

Card 2/2

KOPACH, Ye.N.

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000824420020-9

Algorithm for analyzing the static stability of complex power systems using digital computers. Trudy Sib. nauch.-issl. inst. energ. no.1: 136-153 '64.
(MIRA 18:5)

KOPACH, Y. N.

Simplified review of a problem of static stability of a half-wave tuned electric power transmission line with series connected power takeoff. Trudy Transp.-energ. inst. Sib. otd. AN SSSR no. 16:11-14 '63.
(MIRA 16:11)

18.5100

77435

SOV/130-60-1-18/22

AUTHOR:

Kopachek, A. (Chairman of the Union of Metallurgical Industry and Mine Workers of the Czechoslovakian Republic), translated by Punchokharzhova, T.

TITLE:

Rotary Furnace in the Pipe Rolling Shops of the Combine "Novaya Gruz" imeni Klement Gotval'd in Kunchitsy (Ostrava)

PERIODICAL:

Metallurg, 1960, Nr 1, p 40 (USSR)

ABSTRACT:

This is a corrected version of the same article printed with typographical errors in Metallurg, 1959, Nr 12 (Abstract Nr 76836). In 1959 a new design rotary furnace for heating round billets for seamless tubes, at the above combine was put into operation. The furnace has the following technical specifications: (1) calculated productivity, 40 ton/hr; (2) fuel--mixed gas of calorific power, 1,600 kcal and fuel consumption, 16,000 m³/hr; (3) average furnace diameter, 18 m; (4) outside diameter 24.5 m; (5) width of the hearth, 4 m (chamotte brick lining); (6) weight of hearth 400 ton; (7) charge:

Card 1/2

18.7400

77430

SOV/130-60-1-19/22

AUTHOR: Kopachek, A., translated by Panchokharzhova, T.

TITLE: Equipment for Pipe Insulation by Atomization in the Electrostatic Field

PERIODICAL: Metallurg, 1960, Nr 1, pp 40-41 (USSR)

ABSTRACT: This is a corrected version of the same article printed with typographical errors in Metallurg, 1959, Nr 12 (Abstract Nr 76837). Chief technologist of "Novaya Gut'" Combine (Kombinat "Novaya Gut'") in Czechoslovakia, Yan Burda, proposed the insulation of pipes by atomization in an electrostatic field. The unit works on the principle of electrostatic purification of blast furnace gas. The insulating material is injected, by means of a special automatic atomizing gun, into the area near a horizontally arranged electrode cylinder (formed by thin wires). An electrostatic field of a minimum of 100,000v is created in that area. The very fine droplets of the insulating material are electrically charged and are attracted from all directions

Card 1/3

Equipment for Pipe Insulation by Atomization
in the Electrostatic Field

77436
SOV/130-60-1-19/22

toward the grounded pipe. This method guarantees the uniformity of the insulating layer and prevents any loss of insulating material. The installation has the necessary signalling and blocking system to provide for complete safety. Pipes 114 to 245 mm in diameter can be insulated in the installation. There is 1 figure.

Card 2/3

16.3500

16.3900

S/020/61/141/003/003/021
G111/G444

AUTHOR: Kopachek, I.

TITLE: Solution of the Cauchy problem for hyperbolic equations
by means of finite differences

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 141, no. 3, 1961,
551 - 554

TEXT: In the domain $Q_T = \{0 < x_0 < T, 0 \leq x_i \leq 2\pi, i = 1, 2, \dots, n\}$
the solution with period 2π with respect to x_1, \dots, x_n of the
equations:

$$a(x, D)u = \sum_{|\alpha| \leq m+1} a_\alpha(x) D^\alpha u = f, \quad (1)$$

is searched which satisfies

$$D_0^1 u|_{x_0=0, x' \in \Omega} = \varphi_1(x'), \quad i = 0, 1, \dots, m, \quad (2)$$

where $a(x, D)$ is a normal hyperbolic operator in Q_T and $a_\alpha(x)$ in Q_T ,
satisfying the Lipschitz condition with respect to x_0, x_1, \dots, x_n

Card 1/3

30715

S/020/61/141/003/003/021
C111/C444

Solution of the Cauchy problem...

for $|\alpha| \equiv \sum_{i=0}^n \alpha_i = m+1$, and with respect to x_1, x_2, \dots, x_n for
 $|\alpha| \leq m$. (Let be $D_i \equiv \frac{\partial}{\partial x_i}$, $\alpha = \{\alpha_0, \alpha_1, \dots, \alpha_n\}$, $D^\alpha \equiv D_0^{\alpha_0} D_1^{\alpha_1} \dots D_n^{\alpha_n}$).

For the solution of the considered problem three difference schemes are proposed: The first one is explicit and converges in case of $\Delta x = \Delta x_0 / \Delta x$, $\Delta x = \Delta x_i$ ($i = 1, 2, \dots, n$), being sufficiently small.

The two others are implicit and converge in case of x being bounded. Basing on these schemes and on the embedding theorems of Sobolev, the author proves that the difference approximations converge weakly in $L_2(Q_T)$ to a function u which is 2π -periodic with respect

to x_1, x_2, \dots, x_n , satisfying (1) almost everywhere in Q_T and in the mean taking the value (2). This solution is unique.

The author essentially uses the methods of Gårding and Leray.

The author thanks O. A. Oleynik for the subject and interest.

Card 2/3

30/10

Solution of the Cauchy problem...

S/020/61/141/003/003/021
C111/C444

There are 3 Soviet-bloc and 3 non-Soviet-bloc references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V.
Lomonosova (Moscow State University im. M. V. Lomo-
nosov)

PRESENTED: July 1, 1961, by I. G. Petrovskiy, Academician

SUBMITTED: July 7, 1961

4

Card 3/3

KOPACHEK, I. (Praga, Chekhoslovakiya)

Explicit difference scheme for solving a mixed problem for
a general hyperbolic equation of second order. Zhur. vych.
mat. i mat. fiz. 4 no.5:826-834 S-O '64.

(MIRA 17:12)

On the Dirichlet Problem for Elliptic Equations With a Small Parameter for Highest Derivatives 42-5-10/17

generalized in the sense of Sobolev and which is given by an integral identity.
Three Soviet and 2 foreign references are quoted.

SUBMITTED: May 15, 1957

AVAILABLE: Library of Congress

1. Elliptic equations
2. Integral equations

Card 2/2

APPROVED

NO

REPRODUCED

KOPACHEK, I.

Solution of the Cauchy problem for hyperbolic equations by the method of finite differences. Dokl. AN SSSR 141 no.3:551-554 (MIRA 14:11)
N '61.

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
Predstavleno akademikom I.G. Petrovskim.
(Difference equations)

S/0208/64/004/005/0826/0054

ACCESSION NR: AP4045708

AUTHOR: Kopachek, I. (Prague)

TITLE: Explicit difference scheme for solving a mixed problem for a general second-order hyperbolic equation

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 4, no. 5, 1964, 826-834

TOPIC TAGS: difference equation, generalized solution, stability, convergence, hyperbolic equation

ABSTRACT: The author applies an explicit difference scheme, used by him in several previous papers, to solve a mixed problem for a second-order hyperbolic equation and proves stability of the scheme (energy inequality). He also proves convergence of the solutions of the corresponding difference equations extended to the generalized solution of the mixed problem. This scheme can be used to study regularity of such a solution analogously to the work of O. A. Ladyzhenskaya (Smeshannaya zadacha dlya giperbolicheskogo uravneniya. M.-L., Gostekhizdat, 1953). Orig. art. has: 23 formulas.

Card 1/2

ACCESSION NR: APL045708

ASSOCIATION: none

SUBMITTED: 08Oct63

SUB CODE: MA

NO REF SOV: 002

ENCL: 00

OTHER: 002

Card 2/2

KOPACHEV, A.I.

Casein emulsion for hand protection in work with kerosene and gasoline.
Tof.prom. 36 no.1:34-35 '59. (MIRA 12:3)
(Casein) (Skin--Care and hygiene)

KOPACHEV, A.I.

Compound for filling cavities in cast-iron castings. Torf.prom. 36
no.1:35 '59. (MIRA 12:3)

(Cast iron)

KOPACHEV, D.M.

TRUSOV, I.A.; KOPACHEV, A.M.

BUK-75, the new cable-rotary drilling rig. Razved.i okh.nedr 23
no.8:22-26 Ag '57. (MIRA 10:11)

1. Gidroproyekt.

(Boring machinery)

31845

S/194/61/000/010/082/082
D271/D301

6,7000

AUTHORS: Parfenov, Yu.A., ~~Kopacheva, Yu.I.~~, Goryachev, V.A.,
Minenko, Yu.G. and Mosolova, G.K.

TITLE: Apparatus for automatic measurement of crosstalk
attenuation

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,
no. 10, 1961, 2-3, abstract 10 L10 (Tr. nauchno-
tekhn. konferentsii Leningr. elektrotekhn. in-ta
svyazi, no. 1, L., 1961, 133-141)

TEXT: Measurement of near-end crosstalk attenuation in
multi-pair local telephone cables is at present both labor-consum-
ing and imperfect. In order to reduce time waste and improve the
supervision of the condition of local cables, an apparatus was deve-
loped for automatic measurement of crosstalk attenuation which per-
mits automatic detection of low crosstalk attenuation pairs. The
capacity of the equipment is 200 x 2. The equipment is composed of:

Card 1/2

Apparatus for automatic measurement... ³¹⁸⁴⁵
S/194/61/000/010/082/082
D271/D301

a device for automatic selection of pairs and for signalling and an electronic level indicator. The apparatus operates in the following manner: a relay circuit connects a 800 c/s generator, + 3.0 neper level, one after another to all pairs which are the source of cross-talk; electronic level indicator is connected in sequence to all pairs subject to crosstalk; one by one, all combinations of pairs are explored. In the presence of a combination with reduced cross-talk attenuation the operation is blocked and the signalling system indicates numbers of the interfering and disturbed pairs; subsequently, crosstalk level is measured by a high resistance level indicator, and crosstalk attenuation is computed. Basic circuits of the parts of the system are shown and their principles of operation are described. [Abstracter's note: Complete translation]

4

Card 2/2

KOPACHEVA, Yu.1.; PARFENOV, Yu.4.

Combining of wire broadcasting, telegraphy, and remote control circuits in municipal telephone networks. Vest. svyazi 25 no.7: 2-3 J1 165.
(MIRA 18:8)

1. Starshiy inzh. Nauchno-issledovatel'skogo instituta gorodskoy i sel'skoy telefonnoy svyazi (for Kopacheva). 2. Nachal'nik laboratorii Nauchno-issledovatel'skogo instituta gorodskoy i sel'skoy telefonnoy svyazi (for Parfenov).

KEKUKH, A.M.; KOPACHEVSKAYA, M.N.

Characteristics of different corn varieties with reference to
their temperature requirements. Trudy UKR-NIGMI no.22:39-54
'61. (MIRA 14:6)

(Ukraine—Corn (Maize)—Varieties)
(Plants, Effect of temperature on)

ИПА, I.2.; КОПАЧЕВСКАЯ, М.Н.

Distribution of frosts in the Ukrainian S.S.R. Trudy Ukr. NIGMI
no.6:198-207 '56. (MLRA 10:5)
(Ukraine--Frost)

KOPACHEVSKAYA, M.N.

Late spring and early autumn frosts in the Ukraine. Trudy Ukr.
NIGMI no.8:60-83 '57. (MIRA 11:6)
(Ukraine--Frost)

KOPACHEVSKAYA, M.N.

Special features of frosts in the piedmont regions of the western
Ukraine. Trudy Ukr. NIGMI no.8:84-92 '57. (MIRA 11:6)
(Ukraine--Frost)

Kopachevskaya M.N.

3(7) p.2, 7,

PHASE I BOOK EXPLOITATION

SOV/2384

Konferentsiya po agrometeorologii i agroklimatologii Ukrainiskoy SSR

Materialy konferentsii (Material of the Conference on Agricultural Meteorology and Climatology of the Ukrainian SSR) Leningrad, Gidrometeoizdat, 1958. 247 p. Errata slip inserted. 700 copies printed.

Sponsoring Agencies: USSR. Glavnoye upravleniy gidrometeorologicheskoy sluzhby, Ukrainian SSR. Ministerstvo sel'skogo khozyaystva, Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskii institut, and Ukrainskaya akademiya sel'skokhozyaystvennykh nauk.

Resp. Ed.: G.F. Prikhod'ko; Ed.: V.D. PISOAREVSKAYA; Tech. Ed.: M.I. Braynina.

PURPOSE: This book is intended for agriculturists, agrometeorologists, and instructors in related vuzes.

COVERAGE: This collection of articles deals with problems in agricultural meteorology in the Ukraine. Among the topics discussed

Card 1/7

Material of the Conference (Cont.)

SOV/2384

are: wintering, planting time for winter crops, corn cultivation, potato degeneration, moisture supply, and adverse weather factors. References accompany individual articles.

TABLE OF CONTENTS:

Basov, I.I. [Deputy Minister of Agriculture, Ukr SSR] Introductory Word 3

Bogatyry', T.K. [Chief of the Hydrometeorological Service, Ukr SSR] Practical Hydrometeorological Service for Agricultural Production in the Ukraine 5

Kekukh, A.M. [Ukrainian Scientific Research Hydromet. Institute] Regional Agroclimatological (Reference Books) of the Ukraine and Their Application in Production 10

Prikhot'ko, G.F. [Ukrainian Scientific Research Hydromet. Institute] The State of Agrometeorological Studies in the Ukraine 15

Kopachevskaya, M.N. [Ukrainian Scientific Research Hydromet. Institute] Organization and Utilization of Meteorological Observations

Card 2/7

Material of the Conference (Cont.)

SOV/2384

of Departmental Stations in Scientific Work and Agricultural Practice 23

Vlasyuk, P.A. and M.A. Gurileva. [Ukrainian Scientific Research Institute for Plant Physiology] Special Features of the Wintering Over of Winter Crops in 1955-56 in Various Regions of the USSR 31

Lichikaki, V.M. [Ukrainian Scientific Research Hydromet. Institute] Agrometeorological Conditions of the Wintering of Winter Crops in the Ukraine 40

Lichikaki, V.M. Agroclimatic Basis for the Planting Time of Winter Crops in the UkrSSR 60

Ulanova, Ye. S. [Central Institute of Prognoses] Relationship Between the Phases in the Development of Winter Crops in Autumn and the Agrometeorological Conditions. Probability in Phase Development of Winter Crops as Related to the Different Planting Time in the Ukraine 69

Card 3/7

Material of the Conference (Cont.)

SOV/2384

Fedorova, N.A. [Ukrainian Scientific Research Institute for Agriculture] Significance of Planting Time for the Wintering of Winter Crops Under Poles'ye (Woodlands) and Northern Lesostep (Forested Steppe Regions) Conditions in the UkrSSR 76

Kucheryavaya, M.I. [Ukrainian Scientific Research Institute of Crop Science] Significance of Critical Temperatures in Forecasting the Wintering Conditions 84

Gurileva, M.A. [Ukrainian Scientific Research Institute for Plant Physiology] Forecasting the Reaction of the Various Grades of Winter Wheat Upon the Intermittent Temperatures of the Winter and Early Spring Periods 91

Gurileva, M.A., and N.A. Fedorova. Results of Checking the Method for Determining the Viability of Winter Crops by the Conditions of the Vegetative Cone 96

Iovenko, N.G. [Ukrainian Scientific Research Hydromet, Institute] Moisture Reserves of Various Climatic Soil Zones of the Ukraine 100

Yemets, G.M. [All-Union Scientific Research Institute for Study of

Card 4/7

Material of the Conference (Cont.)	SOV/2384
Sugar Beets] Soil Water Conditions in Beet Crop Rotation	111
Vishnevskiy, V.V. [Odessa Agromet. Station] Moisture Reserves for Winter Wheat in the Southern Odessa Region and the Importance of the Moisture Providing Irrigation	117
Buchinskiy, I. Ye. [Ukrainian Scientific Research Hydromet. Institute] Climatic Study of Sukhoveys (Dry Winds) in the Ukraine	128
Rozova, Ye. S. [Ukrainian Scientific Research Hydromet. Institute] Rainless Periods in the Ukraine	141
Navrotskaya, V.S. [Odessa Hydromet. Institute] Rainless and Wet Periods in the Prichernomorskaya (Black Sea) Steppe	151
Smal'ko, Ya. A. [Ukrainian Scientific Research Institute for Forestry and Agroforestration] Effective Zones of Shelter Belts	155
Dubinsky, G.P. [Khar'kov State University] Microclimate of Irrigated Lands	169
Card 5/7	

Material of the Conference (Cont.,)	SOV/2384
Shakhnovich, A.V. [Ukrainian Scientific Research Hydromet. Institute] Microclimatic Study of Ukrainian Foothills	176
Gol'tsberg, I.A. [Main Geophysical Observatory] Compiling Detailed Microclimatic Maps	182
Pushkarev, V.F. [State Hydrological Institute] Devices and Methods for Measuring Evaporation from Cultivated Fields	185
Romanov, V.V. [State Hydrological Institute] Determining Evaporation from Drained and Non-Drained Swamps by the Heat-Balance Method	193
Kopachevskaya, M.N. Autumn and Spring Frosts in the Ukraine	202
Sapozhnikova, S.A. [Professor, Ukrainian Scientific Research Hydromet. Institute] Climatic Conditions of Corn Cultivation in the Ukraine	214
Rudenko, A.I. [All-Union Institute of Crop Science] The Effect of Climatic Conditions on the Degeneration of Potatoes and the Appear-	

SOV/169-59-7-7128

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 7, p 95 (USSR)

AUTHOR: Kopachevskaya, M.N.

TITLE: The Distribution of the Minimum Temperature in the Two-Meter
✓ Layer of Air Near the Surface in Spring and Autumn

PERIODICAL: Tr. Ukr. n.-i. gidrometeorol. in-ta, 1958, Nr 14, pp 56 - 70

ABSTRACT: Results from observations of the vertical distribution of the minimum temperature in the air in spring and autumn, 1954-1956, from 13 meteorological stations are presented; the stations are located in different natural zones of the Ukrainian SSR. The measurement of temperature was carried out at two times of observation, at 01h.00 and 07h.00 by an unshielded minimum thermometer at altitudes of 0, 2, 20, 50, 100, 150, and 200 cm over bare fallow and by a minimum thermometer in a psychrometric booth. The lowest temperatures are recorded mainly on the ground surface, according to the data from stations located in open country, and at a height of 2 cm in the case of relatively shielded locality of observation. The geographic situation of

Card 1/2

KOPACHEVSKAYA, M. N., Candidate of Geog Sci (diss) -- "Frosts in the Ukraine (Geographical distribution of late spring and early autumn frosts, frost danger in individual regions and methods of protection against frosts, and ways to improve the accuracy of forecasting them)". Leningrad, 1959. 18 pp (Main Admin of the Hydrometeorological Service of the Council of Ministers USSR, Main Geophys Observatory im A. I. Voyeykov), 150 copies (KL, No 21, 1959, 112)

BUCHINSKIY, I.Ye.; KOPACHEVSKAYA, M.N.; MATYUSHENKO, Ye.N.

Results of agrometeorological observations during dry winds.
Trudy UkrNICMI no.29:38-49 '61. (MIRA 15:2)
(Ukraine—Droughts)
(Plants, Effect of aridity on)

KOPACHEVSKAYA, Mariya Nikanorovna[Kopachevs'ka, M.N.]; SHAKHNOVICH,
O.V.[Shakhnovych, O.V.], kand. geogr. nauk, red.; KVITKA,
S.P., tekhn. red.

[Frosts in the Ukraine] Zamorozky na Ukraini. Kyiv, Vyd-vo
UASHN, 1961. 65 p. (MIRA 16:6)
(Ukraine--Frost protection)

KOPACHEVSKAYA, M.N.

Critical period in corn and its agrometeorological characteristics.
Trudy UkrNIGMI no.28:3-12 '62. (MIRA 15:8)
(Ukraine--Corn (Maize)) (Ukraine--Meteorology, Agricultural)

KOPACHEVSKAYA, M.N.

Characteristics of soil drought. Trudy UkrNIGMI no.38:7-20 '63.
(MIRA 17:2)

OKSNER, A.N. [Oksner, A.M.]; KOPACHEVSKAYA, Ye.G. [Kopachevs'ka, Ye.H.]

Rocella fucoides (Neck). Vain. found in the Crimea. Ukr.bot.
zhur. 16 no.1:101-105 '59. (MIRA 12:5)

1. Institut botaniki AN USSR, otdel sporovykh rasteniy.
(Karagach, Mount--Lichens)

KOPACHEVSKAYA, Ye.G. [Kopachevs'ka, IE.H.]

A new *Hinodina* species in the U.S.S.R. *Ukr.bot.zhur.* 16
no.3:82-86 '59. (MIRA 12:8)

1. Institut botaniki AN USSR, otdel sporovykh rasteniy.
(Khomitovskaya Virgin Steppe Preserve--Lichens)

KOPACHEVSKAYA, Ye.G. [Kopachevs'ka, YE.H.]

Lichens new for the Crimea. Ukr. bot. zhur. 18 no.3:96.
101 '61. (MIRA 14:12)

1. Institut botaniki AN USSR, Otdel sporovykh rasteniy.
(Crimea---Lichens).

KOPACHEVSKAYA, Ye.G. [Kopachev'ka, I.E.H.]

Basic types of the habitats of lichens of the Crimean Game Preserve. Ukr. bot. zhur. 18 no.5:83-93 '61. (MIRA 17:2)

1. Institut botaniki AN UkrSSR, otdel sporovykh rasteniy.

KOPACHEVSKAYA, Ye.G. [Kopachevs'ka, IE.H.]

Basic groups of epiphytic lichens of the main woody plants in the
Crimean State Game Preserve. Ukr.bot.zhur. 18 no.6:74-80 '61.
(MIRA 15:3)

1. Institut botaniki AN USSR, otdel sporovykh rasteniy.
(Crimea--Lichens)

KOPACHEVSKAYA, Ye.G. [Kopachevs'ka, YE.H.]

Scientific activity of the Institute of Botany of the Academy of
Sciences of the Ukrainian S. S. R. Ukr. bot. zhur. 19 no.2:108-114
'62. (MIRA 15:6)

(Ukraine—Botanical research)

KOPACHEVSKAYA, Ye.G. [Kopachevs'ka, IE.H.]

Research activities of the Botanical Institute of the Academy
of Sciences of the Ukrainian S.S.R. in 1963. Ukr. bot. zhur.
21 no. 2:109-116 '64. (MIRA 17:5)

ACC NR: AP7000779

SOURCE CODE: UR/0208/66/006/006/1054/1063

AUTHORS: Kopachevskiy, N. D. (Khar'kov); Myshkis, A. D. (Khar'kov)

ORG: none

TITLE: Hydrodynamics in weak force fields. On small oscillations of a viscous fluid in a potential mass-force field

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 6, no. 6, 1966, 1054-1063

TOPIC TAGS: incompressible fluid, viscous fluid, boundary value problem, Navier Stokes equation, mathematic model, surface tension, hydrodynamics

ABSTRACT: A mathematical formulation is given for the problem of small oscillations in a vessel of incompressible viscous fluid with a free surface in a potential force field. Surface tension is taken into account. The viscous incompressible fluid partially fills a vessel of finite dimensions, occupying volume Ω in the equilibrium condition. The volume Ω is bounded by the wall Γ_1 and the free surface Γ_0 . The linearized Navier-Stokes equation and the equation of discontinuity

$$\frac{\partial u}{\partial t} = \nu \Delta u - \nabla p,$$

$$\operatorname{div} u = 0$$

Card 1/2

UDC: 517.9:532

ACC NR: AP7000779

must be satisfied in volume Ω . Normal oscillations are considered, where it is assumed that the dependence of velocity and pressure upon time is in the form $e^{-\lambda t}$ (λ is generally a complex constant). Limiting cases are considered. It is found that the forces of surface tension exert a fundamental effect on the nature of the natural-frequency spectrum. The authors thank S. G. Kreyn and A. D. Tyuptsov for their valuable discussion. Orig. art. has: 17 formulas and 1 graph.

SUB CODE: 20/ SUBM DATE: 30Dec65/ ORIG REF: 011/ OTH REF: 001

Card 2/2

KOPACHEVSKIY, N.K., mladchik defektoskopov (Minsk)

Improved performance of the defectoscope. Put' put.khoz. 8 no.2:
35 '64. (MIRA 17:3)

KUGUKALO, I.A. [Kuhukalo, I.A.], kand. ekon. nauk; KORETSKIY, L.M. [Korets'kyi, L.M.]; LIPSKIY, V.M. [Lips'kyi, V.M.]; KOSTENKO, N.K.; SHKURATOV, O.I.; LINCHEVSKAYA, V.O. [Linchevs'ka, V.O.]; DAVIDENKO, O.P. [Davydenko, O.P.]; VOLOBOY, P.V.; PUCHKO, Yu.S.; KONSEVICH, A.I. [Konsevych, A.I.]; KOPACHINSKAYA, N.I. [Kopachyns'ka, N.I.]; LANDYSH, B.O., red.; DAKHNO, Yu.B., tekhn. red.

[Trends in the specialization and comprehensive development of the Kiev Administrative Economic Region] Napriamy spetsializatsii i kompleksnoho rozvytku Kyivs'koho ekonomichnoho administratyvnoho raionu. Kyiv, Vyd-vo Akad. nauk URSR, 1962. 308 p. (MIRA 16:3)

1. Akademiya nauk URSR, Kiev. Instytut ekonomiky. (Kiev Economic Region--Industries)

BELUKHA, Nikolay Timofeyevich; KOPACHINSKIY, I.V., ekon. retsenzent;
NOVIK, A.M., red.izd-va; ROZUM, T.I., tekhn.red.

[Accounting in automotive transportation units] Uchet v av-
totransportnykh khoziaistvakh. Kiev, Gostekhzdat USSR,
1963. 318 p. (MIRA 17:2)

L 29871-66 EWT(1)/EWP(m)/EWT(m)/T WW/DJ

ACC NR: AP6013216

SOURCE CODE: UR/0421/66/000/002/0141/0144 54

AUTHOR: Kopachevskiy, N. D. (Khar'kov) 52

ORG: none 8

TITLE: Hydrodynamics in weak force fields. Small vibrations of an ideal liquid

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 2, 1966, 141-144

TOPIC TAGS: hydrodynamics, weak magnetic fields, fluid flow

ABSTRACT: The article treats small vibrations of a liquid around the equilibrium position. Within the framework of the linearized theory it is sufficient to limit ourselves to a consideration of the flow potential

$$\mathbf{v} = \nabla \varphi \quad (1.3)$$

Within the volume Ω the continuity equation is satisfied

$$\text{div } \mathbf{v} = 0 \quad (1.4)$$

and at the wall Σ_1 the normal component of the velocity disappears

$$\mathbf{v}_n = \partial \varphi / \partial n = 0 \quad (1.5)$$

Card 1/2

Card 2/2 *fv*

KOPACKA, B.

KOPACKA B.

Odczyn aglutynacji krwinek czerwonych uczulonych wielocukrami pałeczek rodzaju *Salmonella* pod wpływem surowic przeciwtężnych.
[Agglutination of erythrocytes sensitized with polysaccharides from *Salmonella* under the influence of antityphoid sera] *Med. dośw. mikrob.* 2:3-4 1950 p. 349-59.

1. Of the Institute of Medical Microbiology of Warsaw Medical Academy.
CIML Vol. 20, No. 10 Oct 1951

MIKULASZEK, E.; KOPACKA, B.; DYNER, E.

Studies on pyrogens from *Pseudomonas aeruginosa* and *Salmonella typhi*.
Med. dosw. mikrob. 4 no.4:417-427 1952. (CLML 23:4)

1. Of the Institute of Medical Microbiology of Warsaw Medical Academy.

RODOLFO BEATRIZ

[illegible]

ZAKLADU Mikrobiologii (PRAKTIKA)

~~BRONISIAWA KOPACKA~~ *Kopecka, B*
BRONISIAWA KOPACKA

Problem of standardization of agglutination reactions used in the diagnosis of Salmonella infections. Przegl. epidem., Warsz. 11 no. 4: 399-413 1957.

1. Z Zakladu Bakteriologii Panstwowego Zakladu Higieny w Warszawie.
(SALMONELLA INFECTIONS, diag.
agglutination reactions, standardization in Poland (Pol))

Inkubacja

KOPACKA, Bronisława (Warszawa, ul. Chocimska 24, P.Z.H.)

Serodiagnostic problems in typhoid and paratyphoid fevers. Polski
tygod.lek. 13 no.18:679-685 5 May 1958

1. z Panstwowego Zakladu Higieny w Warszawie; Zaklad Bakteriologii
kier.: doc dr med. T.Sporzynski.
(TYPHOID FEVER, diagnosis,
serol., review (Pol))
(PARATYPHOID FEVERS, diagnosis,
same (Pol))

KOPACKA, Bronislawa; LUKAWSKA, Halina; SLUBICKA, Anna

Serological and bacteriological studies in the detection of typhoid carriage. Med.dosw.mikrob. 13 no.1:1-13 '61.

1. Z Zakladu Bakteriologii Panstwowego Zakladu Higieny w Warszawie
i Stacji Sanitarno-Epidemiologicznej w Warszawie.

(TYPHOID transm)

KOPACKA, Bronislawa; SLUBICKA, Anna

Evaluation of vaccines and of the effectiveness of vaccinations against typhoid fever. II. The *S. typhi* antibody picture in the population designated for the control of anti-typhoid vaccination. *Przegl. epidem.* 17 no.1/2:13-21 '63.

1. Z Zakladu Bakteriologii Panstwowego Zakladu Higieny w Warszawie.

(TYPHOID-PARATYPHOID VACCINES)
(ANTIBODIES) (STATISTICS)

KOPACKA, Bronislawa; SLUBICKA, Anna

Evaluation of vaccines and of the effectiveness of vaccinations against typhoid fever. VIII. Serological reactions in subjects vaccinated with various antityphoid vaccines. Przegl. epidem. 17 no.1/2:55-62 '63.

1. Z Zakladu Bakteriologii Panstwowego Zakladu Higieny w Warszawie.

(TYPHOID-PARATYPHOID VACCINES) (STATISTICS)

KOPACKA, Bronislawa; KUKLINSKA-MISZCZYK, Danuta

Some antigenic properties of *S. typhi* O and Vi diagnostic preparations. Med. dosw. mikrobiol. 16 no.4:259-268 '64

1. Z Zakładu Bakteriologii Państwowego Zakładu Higieny w Warszawie (Kierownik: prof. dr. E. Wojciechowski).

359. PHASE EQUALIZERS IN INTERMEDIATE-FREQUENCY
AMPLIFIERS. J. Kopacka and A. Dru.

Blatoproudy Obzor, Vol. 10, No. 8, 466-500 (1958). In Czech.

It is pointed out that phase equalization of i.f. amplifiers should be made by non-minimum phase-shift networks. The required all-pass characteristic can be secured by means of bridged-T quadripoles. Three types of such quadripole, consisting of LCR parameters, are analysed. Expressions for the attenuation, phase shift and group delay of the networks are derived. The group delay characteristics of the networks are plotted as a function of frequency for various values of network bandwidth. The formulae were employed to design two practical networks (for frequencies of 105 and 80 Mc/s, and bandwidths of 30 and 20 Mc/s) and calculated results were in good agreement with measurements.

R.S.Sidorowicz

KOPACKA, Mirolsav, ins.; BURCAR, Jaroslav

Transmission properties of the branch lines 22 kv and municipal cable network 6 kv. Energetika Cz 11 no.8:375-378 Ag '61.

KOPACKA, Miroslav, inz.; BURCAR, Jaroslav

Communication properties of ungrounded overhead wires of 110 kv
transmission lines. Energetika Cz 11 no.11:541-542 N '61.

(Electric wire) (Electric cables)

BURCAR, Jaroslav; KOPACKA, Miroslav, inz.

A new protective device for communication lines placed below high-voltage lines. Energetika Ca 12 no.6:290-296 Je '62.

1. Vyskumny ustav energeticky, Ceske Budejovice.

S/271/63/000/003/019/049
A060/A126

AUTHOR: Kopačka, Miroslav

TITLE: Wiring diagram for remote control or signalling

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 3, 1963, 75 - 76, abstract 3A427 P (Czech. pat., cl. 74b, 8/02, 21c, 47/53, no. 102247, January 15, 1962)

TEXT: Patented is a scheme for instruments for remote control of objects with a small number of commands and signals. At present one uses in these instruments audio-frequency channels which distinguish between separate oscillation frequencies by means of complicated, expensive filters. The basis of the proposed system consists in that the separation of the oscillation frequencies is carried out by a simple device, the same for all the channels. The device lets through only the audio-frequencies which arise from the mixing of the received frequency with the frequency of the local generator which is simultaneous with the transmitter in the reverse direction. The block and schematic diagrams are shown.

[Abstracter's note: Complete translation]

B. Kh.

Card 1/1

KOPACKA, Miroslav, inz.; BURCAR, Jar

Connecting devices in power distribution systems. Bul EGU no.1:8-
13 '63.

BURCAR, Jaroslav; KOPACKA, Miroslav, inz.

Telecommunication lines placed under an AlFe 1:2 high-voltage cable. Energetika Cz 14 no. 4: 165-167 Ap '64.

1. Research Institute of Power Engineering, Worksite Ceske Budejovice.